

SCOPE OF CLAIMS

1. A magnetic resonance imaging apparatus comprising:

5 a gantry including a pair of upper magnet and lower magnet arranged oppositely and concentrically in a vertical direction, sandwiching a measurement space to which an object to be examined is inserted and a pair of columns for supporting the upper magnet installed over the outer parts of the upper magnet and the lower magnet in the vertical direction; and

10 a bed on which the object is placed, including a top plate inserted to the measurement space, wherein

the pair of columns is oppositely arranged with respect to a central axis of the upper magnet and the lower magnet, and

15 a cross sectional area of one column of the pair of columns is made smaller than that of the other.

2. A magnetic resonance imaging apparatus according to claim 1, wherein a width of the column with small cross sectional area in a direction perpendicular to a line connecting centers of the pair of
20 columns is $1/2$ or smaller of that of the other column in the identical direction.

3. A magnetic resonance imaging apparatus according to claim 1 or 2, wherein either or both of the pair of columns has a shape curved
25 toward outside.

4. A magnetic resonance imaging apparatus according to any of claims 1 to 3, wherein the bed is disposed so that the top plate is inserted toward the center of the pair of magnets from the side of the

column with small cross sectional area with respect to a line perpendicular to a line connecting the centers of the pair of columns and passing through the center of the pair of magnets.

- 5 5. A magnetic resonance imaging apparatus according to claim 4, wherein the direction of the line perpendicular to the line connecting the centers of the pair of columns and passing through the center of the pair of magnets intersects with a direction of the top plate insertion at an angle of 15 to 45 degrees, preferably 25 to 35 degrees.

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6. A magnetic resonance imaging apparatus according to any of claims 1 to 3, wherein the bed is disposed so that the top plate is inserted from a position in the vicinity of the column with large cross sectional area toward the center of the pair of magnets.

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7. A magnetic resonance imaging apparatus according to any of claims 4 to 6 further comprising a bed fixing section for determining the position of disposing the bed movable along the periphery of the gantry and connected to a connecting section of the bed, wherein the bed
20 fixing section is disposed so that the top plate is inserted from the predetermined position toward the center of the pair of magnets, and the bed is fixed by connecting the connecting section of the bed with the bed fixing section.

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8. A magnetic resonance imaging apparatus according to any of claims 1 to 6, wherein the column with small cross sectional area has a substantially rectangular cross section, and its longitudinal direction corresponds to the diameter direction of the magnet.

9. A magnetic resonance imaging apparatus according to any of claims 1 to 7, wherein the side surface of the column with large cross sectional area facing the magnet center is tapered with its top pursed .